

CHE520: The Science and History Behind the Atomic Bomb

From 1939 to 1946, the United States Government led a research and development program called the Manhattan Project, that resulted in the development of the first Atomic Bombs. The program was highly secretive, employed 130,000 people at more than 30 sites, and cost nearly \$2 Billion (at its height, equivalent in size to the entire American automobile industry). In this course, we will explore the science behind the bomb, including the details of nuclear fission, and the historical significance of the first Atomic Bombs in relation to helping end World War II and ushering in the Atomic Age. The ethical questions of why the bombs were developed, why they were used, and what role they play in today's political scene will be investigated. Candidates will also collaborate to create a Wiki with imbedded electronic resources designed to meet specified learning objectives. Also, computer-controlled sensors will be introduced and used to measure nuclear chemistry phenomena, along with applications to proposed science lessons.

Credit Hour(s): 3

Department: [Chemistry](#)